

# Notice of Allowability

Application No.

10/660,789

Examiner

Michael t Tran

Applicant(s)

NITTA ET AL.

Art Unit

2818

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed September 12, 2003-December 16, 2003.
2. ☒ The allowed claim(s) is/are 1-10.
3. ☒ The drawings filed on 12 September 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 091203
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_



## DETAILED ACTION

1. In response to the Communication dated September 12, 2003 through December 16, 2003, claims 1-10 are active in this application.

### ***Information Disclosure Statement***

2. The information disclosure statement filed September 12, 2003 has been considered.

### ***Allowable Subject Matter***

3. Claims 1-10 are allowable over the prior art of record.
4. The following is an Examiner's statement of reasons for the indication of allowable subject matter: the prior art of records does not show (in addition to other elements in the claim) the following:
  - ❖ A comparison circuit comparing the threshold voltage of said memory transistor read by said read circuit with the threshold voltage of said reference transistor read by said read circuit and outputting a pulse waveform instruction signal based on a comparison result; and a data signal rewriting circuit supplying a pulse signal train having a pulse waveform in accordance with said pulse waveform instruction signal between the control gate of said memory transistor and said first well region and changing the threshold voltage of said memory transistor from said first voltage to said second voltage

- ❖ A comparison circuit comparing the threshold voltage of said reference transistor read by said read circuit with a reference voltage between said first and second voltages and outputting a pulse waveform instruction signal based on a comparison result; and a data signal rewriting circuit supplying a pulse signal train having a pulse waveform in accordance with said pulse waveform instruction signal between the control gate of each of said reference transistor and said memory transistor and said well region and changing each of the threshold voltages of said reference transistor and said memory transistor from said first voltage to said second voltage.
- ❖ A comparison circuit comparing the threshold voltage of said memory transistor read by said first read circuit with said third voltage generated by said voltage generation circuit, outputting a first pulse waveform instruction signal, if the threshold voltage of said memory transistor is between said first and third voltages, and outputting a second pulse waveform instruction signal, if the threshold voltage of said memory transistor is between said third and second voltages; and a data signal rewriting circuit supplying a pulse signal train between the control gate of said memory transistor and said first well region and decreasing the threshold voltage of said memory transistor from said first voltage to said second voltage.

5. Any comments considered necessary by applicant must be submitted no later than

Art Unit: 2818

the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael T. Tran whose telephone number is (571) 272-1795.

7. Any inquiry of a general nature or relating to the status of this application should be directed to Group receptionist whose telephone number is (571) 272-1650.



Michael T. Tran

October 29, 2004